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TORPEDO ASSEMBLY BUILDING  
(Naval Training Station, Building 262)  
Eastern end of Yerba Buena Island  
San Francisco  
San Francisco County  
California

HAER No. CA-232

PHOTOGRAPHS  
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record  
National Park Service  
Western Region  
Department of the Interior  
San Francisco, California

TORPEDO ASSEMBLY BUILDING  
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HAER No. CA - 232

- Location:** Yerba Buena Island, San Francisco County, California  
Situating at the eastern end of Yerba Buena Island, at the foot of East Point, or Army Point. The building is just north of the San Francisco- Oakland Bay Bridge, beneath the elevated cantilevered spans, oriented parallel to the shore of San Francisco Bay.
- 559 492 ← UTM Zone 10: 559492, 4185247, USGS 7.5 Quad Oakland West, 1959 (rev. 1980)
- Significance:** Building 262 has been determined eligible for listing in the National Register of Historic Places at the state level of significance under Criteria A and C, in the areas of military history and architecture. Its period of significance extends from 1891 through 1960. The Torpedo Assembly Building is the only extant building that signifies and commemorates nearly a half-century of Army presence on this Island. The building is also significant as a very early reinforced concrete building and as the "work of a Master," Earnest L. Ransome, who was among the most important 19<sup>th</sup> century reinforced concrete engineers working in the United States. He designed the first reinforced concrete bridge in the world, the Alvord Lake Bridge in San Francisco's Golden Gate Park. The building is also highly significant because it is almost completely unmodified. The reinforced concrete walls and their patented ashlar-like appearance, and minor elements, such as the windows and interior railroad tracks still exist.
- Description:** The Torpedo Assembly Building is a Neo-Classical style, rectangular, reinforced concrete building, 72' x 158', of tall, 18" thick, reinforced concrete walls, forming gables at the narrow ends. A corrugated metal roof is supported on steel trusses with wooden rafters. The long walls are divided into six bays each with tall wooden sash topped by fanlights. Each end wall includes an arched doorway, with double wooden sliding doors and a fanlight transom, flanked by round-headed arched windows. The interior of the building is divided into two equal rooms with narrow gauge railroad tracks embedded in the concrete slab floor. The window frames appear to be unmodified, covered with plywood on the exterior. Only the wooden rafters and corrugated metal roofing are likely replacements.
- Historical Context:**  
The Army occupied Yerba Buena Island from 1867 through the early 19<sup>th</sup> century, the latter part from 1891 as a small Torpedo (mine) Station as part of the Army's coastal defense strategy. The mines were to be an element of the defense of San Francisco Bay, necessitating construction of a storehouse and assembly house for the mines, electrical cable, explosives, drums, and related equipment. The original brick design was done by Lt. Col. George Mendell, District Engineer, US Army Corps of Engineers. As brick prices escalated dramatically, he elected to use concrete, and turned over the design to San Francisco architects Percy and Hamilton and consulting engineer, Earnest L. Ransome, who had collaborated on several pioneering buildings and structures in reinforced concrete. Ransome's patents included the first universally usable reinforcing bar (twisted square rebar), and the method for creating an ashlar-like appearance in a reinforced concrete wall surface as used in the Torpedo Assembly Building. The Ransome and Cushing construction company built the building in 1891. Although it was actively used until the early 1900's, the coastal defense strategy changed, and ultimately the building was transferred to the Navy in 1960.

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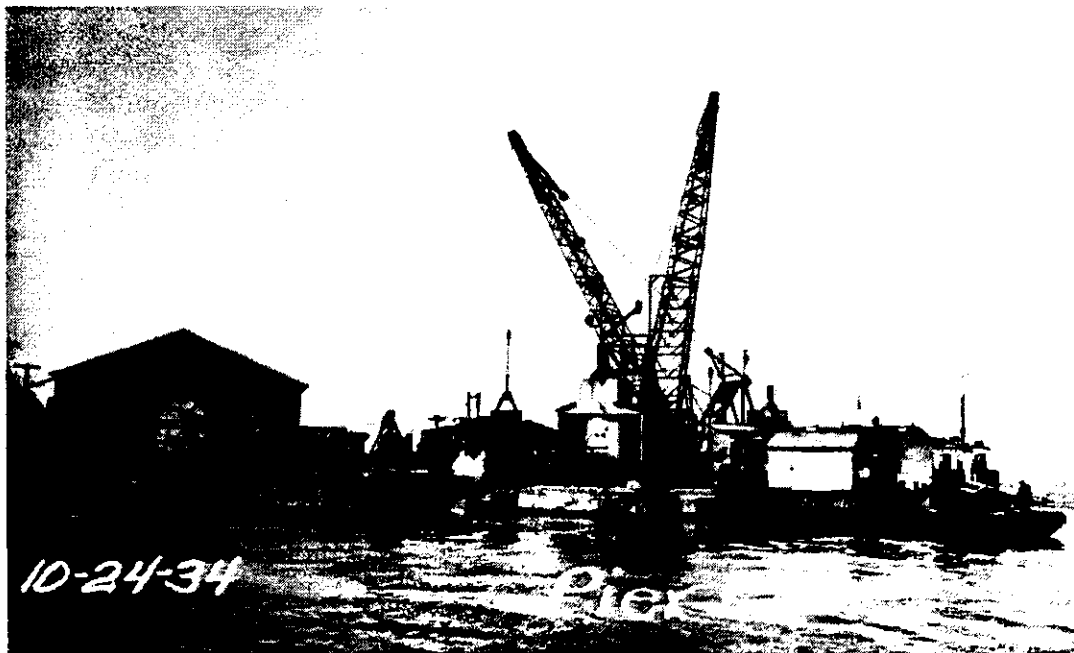
**Sources:** Bibliography:  
State of California Department of Parks and Recreation Primary Historic Resource Record and Building, Structure, and Object Record (DPR523A and 523B) for Building 262, prepared by Stephen D. Mikesell, of JPR Consulting Services for the Navy in 1997. Located at the Office Historic Preservation, Sacramento, California.

**Project Information:**

This structure is being documented as part of the environmental impact study for the proposed seismic retrofit of the San Francisco- Oakland Bay Bridge because the building has been determined potentially eligible for the National Register of Historic Places and because of its close proximity to the existing bridge retrofit project. Architectural data form prepared by Geraldine Peterson, Architectural Historian, 7/1/1998 under Recordation of the San Francisco- Oakland Bay Bridge, California Department of Transportation (Caltrans), Contract Number 040069, Hansen-Murakami-Eshima, Consultants, Dan Peterson AIA, and Associates, Inc, HAER Consultant.

**Supplemental Information:**

Field snapshots (35mm) taken in 1997 by Dan Peterson, Historical Architect, and Geraldine Peterson, Architectural Historian, recording team members with Dan Peterson AIA, and Associates, Inc. showing the elevations of the building, its setting in relationship to the bridge.

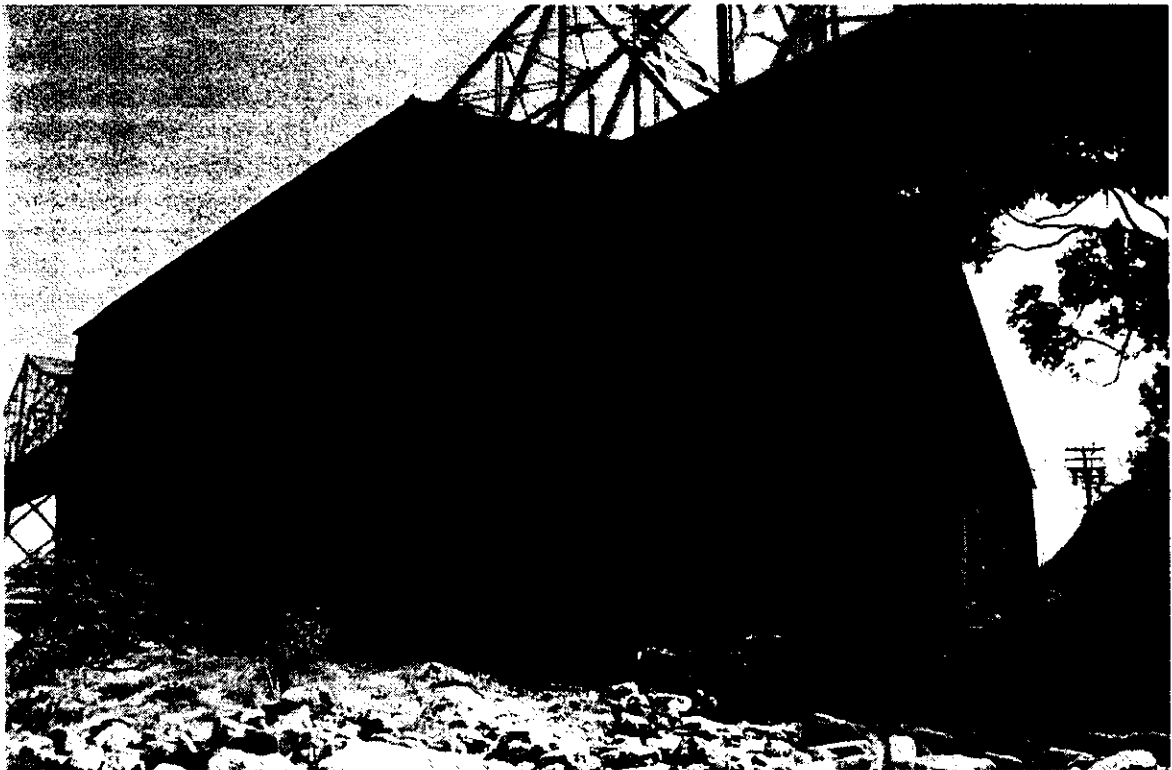


Historic Photo #1 Building with adjacent Pier E-2 under construction. Caltrans photo #4-1041 dated 10/24/34

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Snapshot 1. Torpedo (Mine) Assembly Building (Army), looking west.



Snapshot 2. Torpedo (Mine) Assembly Building (Army), North elevation

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Snapshot 3. Torpedo (Mine) Assembly Building (Army), patent plaque, south elevation adjacent to entry door. "RANSOME'S PATENT NO. 45800 LICENSE NO. 113"



Snapshot 4. Torpedo (Mine) Assembly building, looking northwest, adjacent to Bridge pier.